## OREGON STATISTICAL REVIEW, JUNE 1960

(For details see pp. 7-8)

● **Bank debits** in Oregon during June 1960 were 4.8 per cent above those of June 1959 but fractionally lower than the total debits recorded in May 1960. Year-to-year advances in two of the state's largest areas preserved the gain for the state's total since there were declines in the annual changes shown by seven of Oregon's remaining nine areas.

● **Employment** in non-agricultural industry inched slightly above year-earlier levels by a 1.4 per cent margin. Although the non-manufacturing sector, led by contract construction, showed consistent gains, the manufacturing sector had an overall loss of 3.2 per cent in the comparison of June 1960 totals with those of June 1959. Seasonal advances in all categories showed total employment 3.1 per cent above the figures for May 1960.

● **The index of man-hours** in manufacturing (1951=100) rose to 94.0 in June 1960 from 89.5 in May. The latest estimate, however, was almost 5 per cent lower than its standing in June 1959.

● **The average weekly earnings** of production workers in nonagricultural industry in Oregon during June were estimated as $97.68. This may be compared with the $98.79 reported in May and the $96.81 estimate of June 1959.

● **Lumber production** in the Douglas fir region of the Pacific Northwest in June 1960 fell 13.7 per cent below the average weekly production in June 1959. Current production was also 6.7 per cent lower than the previous month's average. New orders for lumber were 4.6 per cent higher than those reported a year ago and they were 1.9 per cent above May 1960. The file of unfilled orders at the end of June 1960 plunged 15.7 per cent below its year-earlier level and was 8.0 per cent lower than its May 1960 level. Month-end inventories of lumber remained at relatively high levels, almost 30 per cent above the previous year and only 4.1 per cent below the inventory total of May 1960.

● **The value of building permits** issued in Oregon during June 1960 dropped 6.9 per cent below the May totals, but it was 9.4 per cent higher than its level in June 1959.

● **Business failures** in June 1960 totaled 50 and involved liabilities of $1,295,000. This represented a sharp rise from the June 1959 figures of 25 failures and $765,000 in liabilities. Cumulated data show 269 failures in the first six months of 1960 with liabilities of $6,927,000. This total of liabilities was more than 50 per cent higher than the comparable figure of $4,479,000 in 1959. There were also only 213 failures during the first six months of last year.

# Diminishing Stimulus of Low-Cost Power for Industrial Development

By KENNETH M. McCAFFREE
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Public officials, representatives of the Chamber of Commerce and various local industrial development councils, and others have frequently pointed to the availability of large quantities of hydroelectric power in the Pacific Northwest, and from this have concluded that the industrial development of the region was assured. The conclusion seemed sound since the availability of energy at low cost is a trademark of industrially developed regions. Certainly the growth of manufacturing activities in the Washington-Oregon area since World War II gave support to the claim and promise for an industrial Pacific Northwest.

It is the contention of this paper, however, that the stimulus for industrial growth which arose during the last fifteen years from relatively cheap electricity is rapidly disappearing, and that the electric energy potential and present supply of electricity cannot be considered significant of major factors in the further industrial development of the Pacific Northwest. (No attempt is made here to discuss other factors whose presence or absence in the Pacific Northwest may affect the location of industry or otherwise promote or retard the industrial and economic growth of the region.) The contention is supported by two arguments: (1) even a phenomenal expansion in those industries which depend upon large amounts of electricity would affect Pacific Northwest development only marginally; and (2) the region is losing (or has lost) its relative competitive advantage in the production of electric energy.

Only a very few industries, primarily in manufacturing, are heavy users of electric energy, and thus potentially attracted by cheap electric power. As shown in Table 1, the cost of electricity as a per cent of total value added in manufacturing exceeded two and a half per cent in only six major industries in the United States in 1954, the last year for which data on a major industry and sub-industry basis are available.[1] Four sub-industry classifications—pulp, paper and paper board, industrial inorganic chemicals, electro-metallurgical products, and primary non-ferrous metals (aluminum)—use sufficient power that the cost of electricity was seven per cent or more of the value added in manufacturing in both 1947 and 1954.[2] Electric power costs are most important to the electro-metallurgical product firms and to the primary aluminum industry.

1 Value added in manufacturing is comparable to the estimate of "income generated" in an industry, and accordingly is a good estimate of the relative importance of an industry to an area or economy. Value added in manufacturing "is derived . . . by subtracting the cost of materials, supplies, containers, fuels, purchased electric energy, and contract work, from the value of shipments of manufacturing establishments." (U. S. Department of Commerce, Bureau of the Census, *United States Census of Manufactures, 1954 Vol. I, Summary Statistics* (Washington: U. S. Government Printing Office, 1957), p. XXI). The values of shipments are "the received or receivable net selling values, f.o.b. plant, after discounts and allowances, and excluding freight charges and excise taxes." *(Ibid.*, p. XIX).

2 Only "electro-metallurgical products" and "primary aluminum" industries used enough electricity that its cost exceeded seven per cent of the value of the product in 1947. See Edison Electric Institute, "Per Cent Cost of Purchased Power to Value of Product" (mimeographed), 1950. Value of product data are not available for 1954.

# Oregon Business Review

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Contrary to some popular beliefs, the firms which depend upon large amounts of electricity are not a major part of Pacific Northwest industry. In 1954 the value added in manufacturing in the state of Washington was estimated by the Bureau of the Census at $1,549,000. The comparable figure for Oregon was $1,037,000 (Table 2). In Washington about 30 per cent ($452,000,000) and in Oregon less than 10 per cent ($93,000,000) of the value added in manufacturing was attributed to industries who are heavy users of electric power: pulp, paper, paperboard, industrial inorganic chemicals, and primary metals industries.[3] In other words, between seven and eight per cent of Washington state income and approximately three per cent of Oregon state income arose in the four sub-industries that depend so heavily on electricity.[4] On the basis of employment, however, less than four per cent of the Washington labor force and only two and a half per cent of the labor force in Oregon worked in these four industry groups.[5] Thus, if those industries whose power costs are a large part of value added were to double in size by 1970, employment in Washington might rise by four per cent and income generated in the state might be expected to increase by some $350,000,000. Oregon, on the other hand, would be fortunate to increase employment by 7,000 or 8,000 jobs and expand state income by $100,000,000. Such effects are obviously not insignificant, but are hardly evidence of major changes in industrialization. (Some additional employment and thus additional income would probably result indirectly from the expansion of these industries. The effects would not materially change the foregoing judgment.)

Further, the outlook for a substantial expansion of the electro-metallurgical, chemical, and aluminum processing industries in the near future is not good. In the first place, even though these industries doubled their contribution to income in the years between 1947 and 1954, the doubling of value added in manufacturing in the next ten years would seem less likely on grounds of experience alone. Economic growth, except in the most unusual circumstances, has never been a geometric function. The facts, furthermore, indicate the rapid loss of any cost advantage of the Pacific Northwest in the production of electric energy. Power costs have been in the general neighborhood of two to three mills per kilowatt-hour.[6] The expected average cost of energy delivered from plants under construction or planned in 1957 is four and four-tenths mills per kilowatt-hour.[7] On the other hand, the price of electricity has been dropping in other regions. Large electro-process industries now purchase energy at four mills per kilowatt-hour in the Ohio Valley.[8] However, Pacific Northwest utilities must sell energy at about two and a quarter mills per kilowatt hour in order to compete with Ohio Valley power, because of the freight differential between the Pacific Northwest and the Midwest. The aluminum industries, for example, estimate this differential at about one and three-quarters mills per kilowatt-hour when measured in terms of power costs.

TABLE 1

RATIO OF COST OF ELECTRICITY[a] TO VALUE ADDED IN MANUFACTURING, MAJOR INDUSTRY GROUPS AND SELECTED SUB-GROUPS IN THE UNITED STATES 1947 AND 1954

| | *Industry* | *Cost of Electricity as a Percent of Value Added in Manufacturing* 1947 | 1954 |
|---|---|---|---|
| 20 | Food and kindred products | 1.4% | 1.4% |
| | 206 Sugar | 2.6 | 2.0 |
| 21 | Tobacco manufactures | 0.5 | 0.5 |
| 22 | Textile mill products | 1.9 | 2.7 |
| | 222 Yarn and thread mills | 3.3 | 1.3 |
| 23 | Apparel and related products | 0.5 | 0.5 |
| 24 | Lumber and products (except furniture) | 1.1 | 1.5 |
| 25 | Furniture and fixtures | 1.0 | 1.0 |
| 26 | Paper and allied products | 4.4 | 4.5 |
| | 261 Pulp, paper and paperboard | 7.8 | 8.0 |
| 27 | Printing and publishing industries | 0.6 | 0.6 |
| 28 | Chemicals and allied products | 2.5 | 4.7 |
| | 281 Industrial inorganic chemicals | 10.0 | 18.3 |
| | 282 Industrial organic chemicals | 3.2 | 3.6 |
| 29 | Petroleum and coal products | 2.0 | 2.7 |
| | 293 Coke and by-products | 2.6 | 3.4 |
| 30 | Rubber products | 2.3 | 1.9 |
| 31 | Leather and leather products | 0.7 | 0.8 |
| 32 | Stone, clay and glass products | 2.9 | 2.9 |
| 33 | Primary metals industries | 4.3 | 5.2 |
| | 331 Blast furnaces and steel mills | 5.3 | 5.0 |
| | 3311 Blast furnaces | 2.9 | n.a |
| | 3312 Steel works and rolling mills | 4.8 | 5.0 |
| | 3313 Electrical metallurgical products | 33.0 | 26.8 |
| | 3323 Steel foundries | 4.4 | 4.4 |
| | 333 Primary non-ferrous metals | 13.0 | 20.1 |
| | 3331 Primary copper | 3.6 | 4.5 |
| | 3332 Primary lead | 2.9 | 4.7 |
| | 3333 Primary zinc | 11.9 | 12.1 |
| | 3334 Primary aluminum | 50.8 | 27.2 |
| | 335 non-ferrous metal rolling and drawing | 3.6 | 2.8 |
| 34 | Fabricated metal products | 1.2 | 1.2 |
| 35 | Machinery (except electrical) | 1.0 | 0.9 |
| 36 | Electrical machinery | 1.0 | 0.9 |
| 37 | Transportation equipment | 1.1 | 1.0 |
| 38 | Instruments and related products | 0.7 | 0.6 |
| 39 | Miscellaneous manufacturing | 0.9 | 1.1 |

Source: U.S. Department of Commerce, Bureau of the Census, *United States Census of Manufactures*, 1954, Vol. I, *Summary Statistics* (Washington, U.S. Government Printing Office, 1957), pp. 208-4, 208-5.

a The total cost of electricity was computed by adding the cost of purchased electricity to a computed cost for that power generated and used within the industry. The latter was estimated by determining the price of any energy sold by the industry and using this selling price to compute the "cost" of that power both generated and used by the generating firm or industry.

n.a. Not available.

3 The "electro-metallurgical products" and "primary non-ferrous metals (aluminum)" industries are sub-divisions of the "primary metals industries."

Value added for the sub-industries was computed from detailed data available in the U. S. Department of Commerce, Bureau of the Census, *1954 Census of Manufactures: Washington, Bulletin MC-146, pp. 6-8* and *Oregon Bulletin MC-136, pp. 5-7* (Washigton: U. S. Government Printing Office, 1957).

4 Personal income for the state of Washington was estimated at $4,963,000 in 1954; Oregon, $2,903,000. See U. S. Department of Commerce, Office of Business Economics, *Personal Income by States since 1929, A Supplement to the Survey of Current Business* (U. S. Government Printing Office, 1956), p. 141.

5 A few more than 30,000 workers were employed in "pulp, paper and paperboard," "industrial inorganic chemicals," and "primary metals industries" in 1954 in Washington. Less than 8,000 were so employed in Oregon. U. S. Department of Commerce, Bureau of the Census, *1954 Census of Manufactures, op. cit.*

6 K. M. McCaffree, "The Atom vs. Falling Water in the Far Northwest," *Pacific Builder and Engineer*, July 1956, p. 74.

7 This estimate is based on an unpublished table, "Estimated costs of peaking capacity and prime energy," prepared by Jack D. Stevens for the Committee for Economic Development study by the Business Executives Research Committee on "Electric Energy in the Pacific Northwest—Comparative Costs of Production," 1957, Bureau of Business Research, College of Business Administration, University of Washington.

8 Information available from the CED study referred to in footnote 7 above.

TABLE 2

PERCENTAGE OF TOTAL VALUE ADDED IN MANUFACTURING FOR ALL MANUFACTURING INDUSTRIES BY MAJOR INDUSTRY GROUP STATES OF WASHINGTON AND OREGON 1947 AND 1954

| | | *Washington* | | *Oregon* | |
|---|---|---|---|---|---|
| | *Industry Group* | *1947* | *1954* | *1947* | *1954* |
| 20 | Food and kindred products | 16.42 | 14.18 | 14.89 | 13.66 |
| 21 | Tobacco manufactures | a | a | a | a |
| 22 | Textile mill products | 0.30 | 0.20 | 1.92 | 1.39 |
| 23 | Apparel and related products | 1.22 | 1.24 | 1.18 | 1.28 |
| 24 | Lumber and wood products | 32.21 | 20.63 | 54.54 | 55.32 |
| 25 | Furniture and fixtures | 1.53 | 1.14 | 2.29 | 1.13 |
| 26 | Pulp, paper and products | 15.87 | 14.28 | 5.19 | 6.20 |
| 27 | Printing and publishing | 4.92 | 3.66 | 3.64 | 3.68 |
| 28 | Chemicals and products | 1.79 | 7.62 | 1.76 | 1.66 |
| 29 | Petroleum and coal products | n.a. | 0.15 | n.a. | 0.50 |
| 30 | Rubber products | n.a. | n.a. | 0.09 | 0.24 |
| 31 | Leather and leather products | 0.21 | 0.16 | 0.20 | 0.09 |
| 32 | Stone, clay and glass products | 1.98 | 1.72 | 0.98 | 0.93 |
| 33 | Primary metals industries | 7.30 | 10.42 | 2.96 | 3.33 |
| 34 | Fabricated metal products | 3.08 | 2.89 | 3.10 | 3.50 |
| 35 | Machinery, except electrical | 2.90 | 2.52 | 2.91 | 3.01 |
| 36 | Electrical machinery | 0.53 | 0.37 | 0.64 | 1.00 |
| 37 | Transportation equipment | 8.82 | 16.68 | 2.02 | 1.57 |
| 38 | Instruments and related products | n.a. | 0.19 | n.a. | 0.50 |
| 39 | Miscellaneous manufacturing | 0.70 | n.a. | 0.76 | 1.01 |
| | ALL INDUSTRIES: per cent | 100.00 | 100.00 | 100.00 | 100.00 |
| | VALUE ADDED (Millions) | 868 | 1,549 | 667 | 1,037 |
| | EMPLOYMENT in manufacturing | 143,237 | 192,354 | 104,307 | 134,343 |
| | PER CENT manufacturing employment of state employment | 20.16 | 20.64 | 33.91 | 42.52 |

Sources: U. S. Department of Commerce, Bureau of the Census, *1954 Census of Manufactures: Washington, Bulletin MC-146; Oregon, Bulletin MC-136* (U. S. Government Printing Office, 1957).

a Less than 0.01 per cent.

b Based on Washington State Department of Employment Security, *Labor Force and Employment in Washington, Revised 1956*, Olympia, Washington, 1956, and Oregon State Unemployment Compensation Commission, Oregon State Employment Service, *Employment and Payrolls in Covered Industries—Fourth Quarter 1954 (Including Yearly Summary Data)*, Salem, Oregon, 1955.

n.a. Not available.

The estimated cost of four and four-tenths mills per kilowatt-hour for new Pacific Northwest power could conceivably be reduced somewhat by constructing installations made for service loads at high load factor. But because these possibilities are limited in the Pacific Northwest hydroelectric system by the irregularity of water flow on the rivers, the region will in all likelihood still remain at a competitive disadvantage. Undoubtedly considerable difficulty will be experienced in attracting to this region additional industries whose products are importantly affected by the cost of power.

*Summary.* Only a few industries are attracted by low cost electric energy. Thus the industrial growth of the Pacific Northwest, as induced by low cost power seems limited. Power costs in the Pacific Northwest are rising as new and more costly hydropower sites are developed. Costs are falling eleswhere, particularly in the Ohio Valley, and because of the freight differential between the Pacific Northwest and the Ohio Valley, prospective firms may well find costs lower in areas other than the Pacific Northwest. Consequently, those industries in which the cost of electric energy constitutes an important part of product value may not be attracted to this region. It can be hoped that other natural advantages of the Pacific Northwest, such as its lumber and fisheries resources, population expansion, and a high volume of government investment in the region, and a generally prosperous United States economy can combine to promote the continued growth and economic development of the area.

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# Performance of the Oregon Economy in the 1950's

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When, some months ago, I began to do the research leading up to this report on the performance of the Oregon economy in the 1950's, my first impression was that the best thing I could say about the past decade was that it is now *over*. Further research convinced me that although we won't look back on this decade as one of Oregon's best, some important changes and adjustments occurred in the state's economy that do promise well for the future.

First, a very brief, historical survey may be in order. The basis of Oregon's economic growth has always been its natural resources, especially its lumber and agricultural products. The high quality of our resource base and the high productivity of these industries has supported an income level generally above that of the rest of the country. From the early 1880's, when the transcontinental railroad reached Oregon, to 1920, the expansion of our resource base provided very rapid economic growth, much faster than the growth of the nation as a whole. But although growth based on natural resources can for a time be very rapid, the resource base can't be expanded indefinitely, and, if no diversification occurs, growth will slow down. The growth of the state's economy did slow down between the two World Wars but still continued to be more rapid than that of the national economy. Oregon's lumber resources were developed somewhat later than those of the neighboring state of Washington, because less accessible and further away from water transportation, and an important factor in our growth between 1920 and 1950 was the gradual shift of the lumber industry from Washington to Oregon. We became the No. 1 lumber producing state around 1936, and the movement reached its peak in the 1940's with the rapid growth of the lumber industry in southern Oregon. Except for food products, not much developed in the way of manufacturing industry apart from lumber. Distance to major markets and the small size of the regional market made it difficult to develop fabricating industries which could compete successfully with firms located in the East and Middle West. The tremendous expansion of the Oregon lumber industry reached its peak about 1950, and since then we have been feeling the effects of a decline in our number one industry and the lack of diversification in the economic base of the state.

Let's now take a look at the 1950's. We know of course there has been some economic growth—there is visible evidence of this all around us. Eugene, for example, achieved metropolitan area status in the 1960 census. Up in Portland and elsewhere, we see new hotel and office buildings going up, school and college enrollments are rising, and we see many new subdivisions where three or four years ago there were apple orchards and cow pastures. But when we look at statistics which tell us how our growth compares with other parts of the country, with our own past, and with our expectations, the picture is not quite so favorable.

For example, if we compare Oregon's growth over the

past decade with that of the ten other Western states, we find Oregon ranks like this:

In percentage rate of population growth: 9th out of 11 Western states.

In percentage growth of income: 9th out of 11.

In percentage growth of manufacturing employment: 11th.

In percentage growth of total employment: 11th.

Of course the West is a fast-growing area, and Oregon's 16 per cent population increase compares not too badly with the 17 per cent figure for the entire nation. *Within* the state, the area around Portland and the lower Willamette Valley has grown at about the same rate as the state and nation during the past decade, Southwest Oregon quite a bit faster, and Eastern Oregon much more slowly. In past decades, a very large part of our population growth was a result of migration into the state, but now natural increase accounts for by far the larger share. Judging from the estimates of the Census Bureau, it looks as though net civilian migration into Oregon in the 1950's was around 40,000. In most past decades, this has been over 100,000, and was 300,000 in the 1940's. Since 1956, in fact, more people have left Oregon than have migrated into it, though this movement may have been reversed in the past few months.

The expansion of employment opportunities in Oregon has not been keeping up with our population growth in the past decade. This has shown up in people withdrawing from the labor force rather than in increased unemployment. There may be some of what economists call "disguised unemployment" in this situation.

The most serious aspect of this lag in growth of employment opportunities is the fact that Oregon's total manufacturing employment did not expand at all during the 1950's. There have been, however, some interesting changes *within* the manufacturing sector which I will discuss shortly.

Another interesting thing about Oregon's labor force is that there has been very little decline in agricultural employment over the decade, while there has been a terrific drop in agricultural employment nationally. At the same time, income per farmer in Oregon has declined more sharply over the decade than it has nationally and Oregon farmers are now receiving somewhat less income per capita than they did ten years ago, even though prices have risen 20 per cent. This suggests there are people farming in Oregon who would make a move to other occupations if employment expansion in those occupations were sufficiently rapid; in other words, there may be some "disguised unemployment" in our farm economy.

Turning to the state's income, we find Oregon's personal income (that is, income received by individuals) declined from 1.09 per cent of United States personal income over the decade to a little less than 1 per cent. When you break income down on a per person basis, you find Oregon per capita income was $28 above the United States average in 1940, $134 above in 1944 at the peak of the World War II boom, and $111 higher than the United States average in 1950. This drop in the late 40's would be expected as a normal consequence of the war's end, but the drop which occurred in the 1950's gives us more cause for concern. By 1957, income per person in Oregon was $75 *below* the national average, and though we have recovered a bit since then, the latest figures show Oregon's per capita income still below the nation's. Another way of looking at this is that real income per person in the United States, that is, discounting price changes, increased about 21 per cent over the period 1948 to 1958, but in Oregon, the increase was only about 4 per cent.

The chief causes of the relative decline in Oregon's per capita income are these:

1. The decline in our employment levels relative to the nation. As I pointed out, this has come about through people withdrawing from the labor force rather than through a rise in unemployment.

2. The decline in income earned by Oregon farmers has been greater than the decline in farm income nationally.

3. Wages earned by Oregon manufacturing workers have not risen as rapidly as manufacturing wages nationally. This is partly because wages have risen most rapidly in the big mass-production industries which are not well represented in Oregon.

4. Since the rest of the country has been industrializing more rapidly than Oregon, we have in a relative sense become more of an agricultural state over the decade, and this change in industrial structure has contributed to our per capita income decline because incomes are generally considerably higher in manufacturing than in agriculture.

A few other factors like the slightly larger proportion of older citizens in Oregon have had a minor but not too significant effect.

Up to this point, the comparisons haven't been too favorable. There is, however, a brighter side to the performance of the Oregon economy in the 1950's. For one thing, we have experienced population growth which will add to the attractiveness of our area as a market for new industries. The most significant development, however, is the industrial transformation that has occurred in the manufacturing sector of our economy. While total employment in this sector has remained stable, there has been a shift *within* the sector. These changes have been along the lines of more advanced processing of our forest products and growth of our manufacturing economy outside the forest products area. This is encouraging because it is largely from these directions that the impetus for the state's future economic growth must come. Over the decade, a big decline in employment in the basic lumber industry has been roughly offset by a gain of 15,000 employees in the plywood industry and a gain of about 15,000 in a variety of other manufacturing industries. Apart from the plywood industry, which is the single most spectacular example of industrial growth, the biggest gains have been in the pulp and paper industry, in primary metals (mostly aluminum and other electro-process industries), in electrical machinery, and in food products. For the most part, these are industries which pay above average wages. This will be a favorable factor in the state's income situation in the future. The extent of this industrial change can be gauged from the fact that the basic lumber industry provided 50

per cent of Oregon's manufacturing industry in 1950 and now provides only 33 per cent. Other industries have taken up the slack.

These trends hold cautious promise for the next decade or two. If this recent growth in manufacturing outside the wood products area continues, and if the decline in the basic lumber industry slows down, there will be a resumption of the growth of our overall manufacturing sector in the next decade. It seems unlikely that basic lumber industry employment will decline as steeply in the next decade as it did in the fifties. Most of our Douglas fir lumber goes into residential construction and with the rapid rate of family formation expected in the next decade, demand for this product should be high. At the same time, the plywood industry probably will grow less rapidly in the next decade, and it seems likely that farm employment will decline more than it did in the 1950's. It seems to me unlikely that the per capita income situation will get much worse, but beyond that it is very hard to predict. All in all, there are some prospects that the 1960's in Oregon will be better than the 1950's, but there is nothing in the cards to indicate a return to anything like the phenomenal rate of growth experienced in the forties. The most favorable opportunities Oregon has for further economic growth appear to be in the further advanced processing of forest products, especially in pulp and paper, in the growth of a variety of industries attracted by the expanded size of the Pacific Northwest market, in the gradual development of a chemical industry making use of the wide variety of power sources that are becoming available, and in the development of our recreational resources. There may also be some opportunities for further expansion of our electro-process industries, particularly after final settlement with the Canadians is made, although our power cost advantage over other regions has been eroded considerably in the past decade. No one of these opportunities promises rapid or sensational industrial gains. We are somewhat in the position of a football team with limited natural advantages which, rather than going for the long gainer or the sensational touchdown pass must make three yards at a time, punt often, and wait for the breaks. But that kind of team often does very well over the long pull.

The question arises, of course, how much industrial growth we really want. If I didn't raise this question, someone else would be sure to. What, for example, happens to Oregon as a hunting and fishing mecca if we experience a rapid industrial growth? Industrial growth is, after all, a means to an end and not an end in itself. Rapid growth at the expense of depletion of our resource base would not be desirable. Rapid growth, if not carefully planned, might damage the possibilities of long run development of our recreational opportunities. We may be impressed by the experience of California in growing from 10 to 15 million population over the past decade, but we don't envy them their smog. A good deal of the recent economic growth in the neighboring states of Washington and California has been based on expansion of defense industries; at least Oregon isn't in the position of our friends up in Washington who sit around wondering what is going to happen to them if peace suddenly breaks out. Very rapid economic growth can also place a severe strain on the fiscal resources of the state because of the greatly enlarged demand for expanded public services. Slow growth, on the other hand, brings even more severe fiscal problems and an outmigration of the brightest and most ambitious of an area's younger citizens, whose expenses of training have been paid by their home area but who will make their productive contribution somewhere else in the country. Of course, if a country is going to have economic progress, there have got to be some areas growing faster than others and there has got to be migration of people from areas of lesser economic opportunity to areas of greater opportunity. We in Oregon now seem to be at a crossroads that will determine the kind of area we will be in the future. On balance, it seems to me that rather than looking for extremely rapid growth in the next decade or two we should count our progress pretty satisfactory if our economy expands at about the same rate as the national economy and our per capita income stays at least equal to the national level. National growth of population and income, barring some catastrophe, are going to be very rapid over the next ten or twenty years, and we should not be too unhappy to enjoy a proportionate share of that growth.

I want to add a brief word about the role of government in the growth of Oregon. Historically, this has been an important factor in the economic development of the West. The state government has recently established a Department of Planning and Development to study ways of increasing our industrial development. Of course this department will have a lot of competition since practically every other state has one of these development agencies drumming up new industry. But since we are honest and truthful folk here in Oregon, we have a big advantage in this kind of competition because it's probably true that, in the long run, the state that tells the biggest lies will get the least industry. We who are in higher education believe the state can make a valuable contribution to economic development through investment in public services such as education and research which provide a vital foundation for long-run economic growth. Federal government policies play an important role in Oregon's economy in a number of respects. In its efforts to restrain monetary inflation in the past half dozen years, the monetary policies of the government have exercised a more severely retarding effect on the Oregon economy and on the lumber industry than they have on other regions of the country and other industries. Although I think a reappraisal of our national monetary and other stabilization policies is in order, those who think present policies should be modified have the responsibility for recommending alternative or supplementary means of restraining inflation. This, however, is a highly complex subject, and to do it justice requires another whole article.

I shall summarize by saying that although Oregon's economic growth and income trends have not been as impressive as those of the nation and other areas of the West during the past decade, there has been an important diversification of manufacturing industry in the state. Growth in the future will come, not from any single spectacular cause, but from a number of smaller influences which, added together, make the prospects for the 1960's somewhat more favorable than the decade just past. To maintain a rate of growth and a level of income comparable to that of our national economy will, however, take a good deal of effort and careful integration of regional and national economic policies.

## New Fuel Available in Oregon

An additional source of power in Oregon is expected to provide a needed incentive for the economy of the area. This boost should come with the increased availability of natural gas after September of this year. El Paso Natural Gas Company of Texas, one of the nation's two largest gas transmission firms, is completing the construction of a 120-mile conduit through the Willamette Valley. This new lateral taps the regional overland pipe a few miles north of Camas, Washington, where the line runs nearest to Portland. The new pipeline is being built at a cost of $10,500,000 and will bring a fuel hitherto unavailable to at least six Willamette Valley communities this first year. The local distributing utility company is Northwest Natural Gas Company, which will buy the gas from El Paso. Natural gas has been in use in Portland, Oregon, only since 1956 when it was first brought to the Pacific Northwest by means of a $212,000,000 pipeline from the Southwest. At that time it was expected that gas would have an impact on the Oregon economy because it was a preferred source for the heat needed at some point in almost every industrial processing cycle (*Oregon Business Review*, Vol. XIV, No. 12, Dec. 1955).

This additional 20-inch line will more than double the supply of natural gas now available to Portland and the Willamette Valley and will permit the daily transport into Oregon of 170,000,000 cubic feet of gas. The amount of gas that can be brought into Oregon in one day is equivalent to the amount sufficient to heat 150,000 homes for an entire year.

Most of the gas coming in through the new pipeline is from the Peace River country of British Columbia and Alberta. Continuing discovery of new sources of the fuel assures a supply for many decades to come. The Northwest has an additional and unusual advantage in supply because a second source is always available, whenever needed, from the United States fields in Northern New Mexico and Wyoming; this was the origin of supply when natural gas was brought into the Northwest in 1956.

Tapping the overland line and bringing the lateral pipe the short distance from Camas, Washington, to the mouth of the Sandy River just east of Portland, Oregon, meant crossing the Columbia River, a complex engineering maneuver. Four sections of 20-inch pipe, 1,100 feet in length were pulled across the river; each was welded to the end of the next as the section was pulled into the river. The steel pipe weighs 166 pounds per lineal foot, a total of 365 tons for the section laid under the river. A ditch in which to lay the pipe had to be dredged in the river bottom at a depth of 65 feet below the surface at the deepest part to meet the requirements for the shipping channel. To protect the pipe during the pull, it was heavily coated in asphalt and wrapped in "snow fencing," which is wooden lath bound together with wire. Ten bulldozers and caterpillar tractors were used to pull the pipe into the Columbia and across to the Oregon side.

The Pacific Northwest will require new sources of power if it is to develop industrially. As economical hydro-electric power sites become scarce, natural gas, and possibly nuclear fuel, may provide the necessary increase.

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## Wages and Salaries in the Portland Area

Stenographers employed in offices in the Portland metropolitan area averaged $74.50 a week in May 1960, according to Charles A. Roumasset, Acting Regional Director of the U.S. Department of Labor's Bureau of Labor Statistics. Salaries for women in other clerical jobs studied ranged from $51 for office girls to $85.50 for secretaries. Experienced accounting clerks averaged $85, payroll clerks $79, comptometer operators $73.50, key punch operators $73, and switchboard operators $68. Average scheduled hours of work were either 40 per week or less than 40, in most occupations.

In most skilled maintenance occupations studied, men averaged more than $2.90 an hour. Pay averages were $3.06 an hour for electricians, $3.01 for machinists, $2.97 for pipefitters, $2.98 for painters, $2.91 for mechanics and millwrights, and $2.77 for mechanics maintaining automotive equipment.

In custodial and material moving jobs, average rates ranged from $1.33 for women operating passenger elevators to $2.61 for drivers of heavy trucks other than the trailer type. Other truck drivers earned $2.37 on light trucks, $2.49 on medium trucks, and $2.60 on heavy trailer type trucks. Material handling laborers averaged $2.28 an hour, and janitors, $1.32.

Industrial nurses, one of the professional and technical occupations included in the survey, averaged $87.50 a week. Salary rates for junior draftsmen were $93 and senior draftsmen $114.50.

This preliminary report is based on the results of a May 1960 survey on wages and salaries paid by 151 Portland area manufacturing and nonmanufacturing firms employing about 59,000 workers. The companies studied are representative of more than 500 establishments with about 107,000 employees in the area.

A final report, to be available in the near future, will present a more detailed analysis of the area's wage structure as well as wage and salary data for selected occupations separately in manufacturing; non-manufacturing; transportation, communication, and other public utilities; and retail trade. Data for wholesale trade; finance, insurance, and real estate; and the services industries, also within the scope of the study, will be included in all-industry and non-manufacturing estimates. In addition, the final report will contain information pertaining to personnel practices and supplementary benefits such as health insurance, and pension plans; and paid holidays and vacation allowances.

Tables showing the details of the preliminary results of the survey are available upon request to the Western Regional Office of the Bureau of Labor Statistics, 630 Sansome Street, San Francisco 11, California.

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The August *Review* will carry a discussion of international business from the point of view of adequately relating American ideas and institutions to Asiastic hopes and problems. The author is Richard D. Robinson, lecturer at the Harvard Center for Middle Eastern Studies.

# OREGON STATISTICAL REVIEW

**Lumber.** The figures below were reported by the West Coast Lumbermen's Association. They cover the Douglas fir area of the Pacific Northwest and are in thousands of feet, board measure.

| | *June 1960* | *May 1960* | *June 1959* |
|---|---|---|---|
| Average weekly production | 151,953 | 162,869 | 176,118 |
| Average weekly orders | 153,450 | 150,528 | 146,728 |
| Unfilled orders, end of month | 488,166 | 530,846 | 578,954 |
| Lumber inventory, end of month | 1,148,226 | 1,197,494 | 884,231 |

**Employment.** Information on employment in Oregon is reported each month by the State Department of Employment in Salem. The latest figures follow:

| | *June 1960* | *May 1960* | *June 1959* |
|---|---|---|---|
| Lumber & wood products | 74,900 | 73,200 | 79,300 |
| Food & kindred products | 23,100 | 18,000 | 23,900 |
| Other manufacturing | 52,000 | 51,300 | 51,800 |
| Total Manufacturing | 150,000 | 142,500 | 155,000 |
| Contract construction | 28,300 | 25,800 | 25,000 |
| Retail trade | 81,000 | 79,500 | 78,200 |
| Government | 94,100 | 93,900 | 91,100 |
| Other nonmanufacturing | 157,600 | 154,400 | 155,000 |
| Total nonmanufacturing | 361,300 | 353,600 | 349,300 |
| Total Wage and Salary Employment | 511,300 | 496,100 | 504,300 |

**Business Failures.** The Dun and Bradstreet report on commercial failures is considered an indicator of business health. The figures for Oregon follow:

| | *1959* | | *1960* | |
|---|---|---|---|---|
| | *Number* | *Liabilities* | *Number* | *Liabilities* |
| Jan. | 25 | $ 515,000 | 41 | $ 590,000 |
| Feb. | 38 | 909,000 | 45 | 1,229,000 |
| Mar. | 54 | 1,161,000 | 46 | 1,414,000 |
| Apr. | 29 | 497,000 | 49 | 995,000 |
| May | 42 | 632,000 | 38 | 1,401,000 |
| June | 25 | 765,000 | 50 | 1,295,000 |
| July | 52 | 953,000 | | |
| Aug. | 56 | 1,015,000 | | |
| Sept. | 34 | 534,000 | | |
| Oct. | 36 | 660,000 | | |
| Nov. | 39 | 594,000 | | |
| Dec. | 41 | 1,550,000 | | |

**Construction.** The Bureau of Business Research, in cooperation with the F. W. Dodge Corporation, reports May 1960 construction contracts in Oregon had a total value of $32,791,000. This is 13 per cent below May 1959. Comparative data, in thousands of dollars, follow:

| | *May 1960* | *Apr. 1960* | *May 1959* |
|---|---|---|---|
| Nonresidential | $10,609 | $ 9,003 | $ 9,981 |
| Residential | 16,116 | 14,275 | 17,004 |
| Public works & utilities | 6,066 | 12,380 | 10,580 |
| Totals | $32,791 | $35,658 | $37,565 |

Nonresidential construction was 729,000 square feet in May 1960 and 937,000 square feet in May 1959. In May 1960 contracts were bid for 1,291 residential units totaling 1,430,000 square feet. One year earlier there were 1,340 units totaling 1,623,000 square feet.

The cumulative total for the first 5 months of 1960 shows that the value of building contracts in Oregon was 4 per cent lower than for the comparable period in the previous year. For the eleven western states the cumulative 5 month total for 1960 was 8 per cent lower than for the previous year. The national total was 8 per cent lower for 1960 than for the comparable period in 1959. The figures quoted in this paragraph do not include public works or utilities.

**Cash Receipts from Farm Marketing.** The cumulative receipts from the sale of farm produce were $114,816,000 for the first 5 months of 1960. This is a drop of 4.6 per cent from the 1959 cumulative total of $120,338,000 for 5 months. The following table shows the monthly comparisons in thousands of dollars. Figures are from the monthly report of the United States Agricultural Marketing Service.

| | *1959* | *1960* | | *1959* |
|---|---|---|---|---|
| Jan. | $33,479 | $29,796 | July | $45,194 |
| Feb. | 21,901 | 23,076 | Aug. | 51,956 |
| Mar. | 24,117 | 21,205 | Sept. | 61,247 |
| Apr. | 21,693 | 20,775 | Oct. | 41,256 |
| May | 19,148 | 19,964 | Nov. | 29,153 |
| June | 31,614 | ---- | Dec. | 39,359 |

**Banking.** Loans, investments, and desposits of Oregon banks that belong to the Federal Reserve System are shown below (in millions of dollars):

| | *May 1960* | *Apr. 1960* | *May 1959* |
|---|---|---|---|
| Loans | $ 943 | $ 934 | $ 850 |
| Investments | 606 | 620 | 701 |
| Deposits | 1,611 | 1,680 | 1,691 |

**Average weekly earnings of production workers** in manufacturing industries in Oregon provide timely information on current trends of labor costs as well as rough measures of average income available for purchasing goods and services. Both aspects of this information make the figures valuable for consolidations with other data in evaluating the current business situation. Data in the following table are supplied by the Research and Statistics Division of the State Department of Employment.

| | *1959* | *1960* |
|---|---|---|
| Jan. | $92.72 | $95.72 |
| Feb. | 93.93 | 96.78 |
| Mar. | 96.17 | 96.47 |
| Apr. | 96.53 | 98.57 |
| May | 98.30 | 98.79 |
| June | 96.81 | 97.68 |

**Advertising linage.** The Oregon Newspaper Publishers Association reports that during June 1960 there were 635,437 column inches of local retail advertising in 20 daily Oregon newspapers. This is an increase of 7.8 per cent over June 1959, when total linage was 589,625 column inches. For the first six months of 1960 advertising linage was 3,559,215 column inches. This is an increase of 4.5 per cent from the 1959 cumulative six-month figure of 3,404,779.

**Electric Energy.** During May 1960, kilowatt hours of electricity sold by privately-owned electric utilities in Oregon were 10 per cent above sales in May 1959. During the twelve months ending May 31, 1960 sales were 12 per cent above the twelve-month period ending one year earlier. These data are supplied by the Public Utility Commissioner of Oregon.

**Life Insurance Sales.** During May 1960, sales of ordinary life insurance in Oregon were 9 per cent ($3,563,000) higher than in April 1960 and 14 per cent higher than in May 1959. The national figures showed a 5 per cent gain in comparison with April 1960 and a 4 per cent gain in comparison with May 1959. These data appear in the Monthly Survey of the Life Insurance Agency Management Association.

**Index of Man Hours in Manufacturing.** A reliable index of change in manufacturing activity is the man hours of industrial production workers. The index is made by the Bureau of Business Research from data supplied by the State Department of Employment (1951=100). Figures apply only to personnel engaged in direct manufacturing; sales, office, and general administrative employees are excluded. No adjustment for seasonal variation has been made. The most recent reading for Oregon is for June 1960.

| | *1959* | *1960* | | *1959* |
|---|---|---|---|---|
| Jan. | 79.1 | 82.9 | July | 100.2 |
| Feb. | 79.3 | 84.3 | Aug. | 107.4 |
| Mar. | 83.3 | 85.3 | Sept. | 102.9 |
| Apr. | 87.2 | 87.9 | Oct. | 97.6 |
| May | 92.1 | 89.4 | Nov. | 94.1 |
| June | 98.6 | 94.0 | Dec. | 89.6 |

**Department Store Sales.** Figures on department store sales are compiled by the Federal Reserve Bank of San Francisco for the Portland area, Eugene, and Salem. The data are released for Portland each week, and once a month for all three cities and the state as a whole.

The most recent Portland area data are for the week ending July 9, 1960, when sales were 20 per cent below those of the corresponding week in 1959.

Sales for the three cities and for Oregon for the month of May and from January 1, 1960 to May 31, 1960 have been compared with those for the corresponding periods of time one year earlier. Percentage changes are shown in the following table:

| | *May 1960* | *Jan. 1, 1960 to May 31, 1960* |
|---|---|---|
| Portland area | —4 | — 1 |
| Eugene | —5 | +14 |
| Salem | +4 | + 5 |
| Oregon | —4 | 0 |

# Oregon Business Review

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## BANK DEBITS

Bank debits represent the dollar value of checks drawn against the deposit accounts of individuals and business firms. Bank debits are considered good indicators of current business activity. But their value for this purpose can be impaired if they include large checks used to transfer funds for the purchase of certain kinds of capital assets that are not "business activity." Each month the Bureau of Business Research collects data on bank debits from 191 banks and branches.

| | *Number of Banks Reporting* | *Debits June 1960* | *Debits May 1960* | *Debits June 1959* | *Percentage change June 1960 compared with May 1960* | *Percentage change June 1960 compared with June 1959* |
|---|---|---|---|---|---|---|
| Oregon | 191 | $2,072,430,567 | $2,082,351,288 | $1,977,978,542 | — 0.5 | + 4.8 |
| Portland area (Multnomah, Washington, Clackamas, Columbia counties) | 62 | 1,352,491,607 | 1,377,591,956 | 1,250,855,524 | — 1.8 | + 8.1 |
| Mid-Willamette Valley (Polk, Benton, Linn, Marion, Yamhill counties) | 40 | 230,781,087 | 239,567,259 | 220,659,255 | — 3.7 | + 4.6 |
| North Oregon Coast (Tillamook, Clatsop, Lincoln counties) | 10 | 36,222,128 | 33,714,312 | 36,409,694 | + 7.4 | — 0.5 |
| West Central Oregon (Douglas, Lane, Coos counties) | 22 | 184,609,124 | 171,373,226 | 191,259,824 | + 7.7 | — 3.5 |
| Southwestern Oregon (Curry, Jackson, Josephine counties) | 13 | 96,377,527 | 91,564,868 | 100,550,794 | + 5.2 | — 4.2 |
| Upper Columbia River (Sherman, Hood River, Wasco, Gilliam, Wheeler counties) | 9 | 28,477,908 | 26,737,861 | 27,232,021 | + 6.5 | + 4.6 |
| Pendleton area (Umatilla, Morrow counties) | 8 | 30,386,994 | 28,205,797 | 32,203,511 | + 7.7 | — 5.6 |
| Central Oregon( Deschutes, Crook, Jefferson counties) | 5 | 28,527,437 | 30,800,426 | 32,349,646 | — 7.4 | —11.8 |
| Klamath Falls area (Klamath, Lake counties) | 7 | 36,334,656 | 34,459,971 | 38,835,021 | + 5.4 | — 6.4 |
| Baker, La Grande area (Baker, Grant, Wallowa, Union counties) | 10 | 25,455,660 | 25,526,933 | 26,622,097 | — 0.3 | — 4.4 |
| Burns area (Harney, Malheur counties) | 5 | 22,766,439 | 22,808,676 | 21,001,155 | — 0.2 | + 8.4 |

## BUILDING PERMITS

Building permits are a report of plans rather than of construction in actual operation. Interpretation of these data must allow for time elapsed between the issuing of the permit and the beginning of construction. The information has been collected by the Bureau of Business Research from building departments in local governments.

| | *New Residential June 1960* | *New Non-Residential June 1960* | *Additions Alterations & Repairs June 1960* | *Totals June 1960* | *Totals May 1960* | *Totals June 1959* |
|---|---|---|---|---|---|---|
| Albany | $ 85,216 | $ 167,350 | $ 7,100 | $ 259,666 | $ 77,540 | $ 452,519 |
| Baker | 57,000 | 7,250 | 5,707 | 69,957 | 42,832 | 83,000 |
| Beaverton | 143,330 | 311,500 | 9,685 | 494,515 | 201,660 | 78,620 |
| Bend | 81,000 | 1,150 | 17,845 | 99,995 | 189,189 | 108,500 |
| Coos Bay | 15,000 | 15,250 | 22,040 | 52,290 | 94,724 | 94,170 |
| Corvallis | 288,000 | 13,350 | 59,065 | 360,415 | 211,565 | 2,589,625 |
| Eugene | 616,185 | 1,971,950 | 144,935 | 2,736,070 | 843,235 | 1,199,839 |
| Grants Pass | 61,500 | 63,500 | 9,550 | 137,550 | 289,500 | 109,850 |
| Hillsboro | 97,000 | ..... | 12,390 | 109,390 | 174,800 | 142,000 |
| Klamath Falls | 31,600 | 74,500 | 50,030 | 156,130 | 237,190 | 138,715 |
| La Grande | ..... | ..... | 90,301 | 90,301 | 53,153 | 158,250 |
| McMinnville | 108,000 | 1,250 | 50,300 | 159,550 | 456,791 | 88,293 |
| Medford | 139,500 | 78,639 | 43,683 | 261,822 | 378,803 | 1,011,900 |
| Milwaukie | 590,787 | ..... | 4,543 | 595,330 | 268,900 | 113,720 |
| North Bend | 57,880 | 11,680 | 7,198 | 77,058 | 83,741 | 211,448 |
| Pendleton | 86,500 | 38,800 | 91,068 | 216,368 | 1,929,605 | 60,280 |
| Portland | 1,337,950 | 2,529,515 | 1,259,820 | 5,147,285 | 9,191,385 | 4,506,735 |
| Roseburg | 80,775 | 245,000 | 21,225 | 347,000 | 377,930 | 243,012 |
| Salem | 99,000 | 152,750 | 148,578 | 400,328 | 439,532 | 462,250 |
| Springfield | 57,095 | 347,106 | 27,189 | 431,390 | 101,831 | 98,733 |
| The Dalles | 16,000 | 130,100 | 2,435 | 148,535 | 139,803 | 162,829 |
| Clackamas County | 651,890 | 106,150 | 3,545 | 761,585 | 762,555 | 759,325 |
| Douglas County | 97,680 | 40,580 | 4,300 | 142,560 | 72,166 | 484,703 |
| Lane County | 2,144,868 | 276,170 | 483,995 | 2,905,033 | 1,145,966 | 1,431,361 |
| Marion County | 561,614 | 45,300 | 65,380 | 672,294 | 801,471 | 828,392 |
| Multnomah County | 1,763,789 | 348,691 | 218,921 | 2,331,401 | 2,172,646 | 2,919,293 |
| 115 other communities | 1,502,336 | 2,008,394 | 472,179 | 3,982,909 | 4,131,139 | 2,621,203 |
| Totals | $10,794,495 | $9,018,925 | $3,333,307 | $23,146,727 | $24,869,652 | $21,158,565 |